REMARKS

Preliminary Remarks

Reconsideration and allowance of the present application based on the following remarks are respectfully requested. Claims 15, 16, 18-24, and 26-37 are currently pending and at issue.

The applicants have amended claim 15 to be directed to a method for treating infertility disorders by administering an LH-RH antagonist and administering an exogenous gonadotropin for inducing follicle growth, the improvement comprising administering the LH-RH antagonist within a controlled ovarian stimulation program either in a single or dual dose regimen of 1 to 10 mg. Support for amended claim 15 can be found throughout the specification, for example, on page 5, lines 14-19; page 6, line 3; Table 1, line 3; and originally filed claim 6.

Amended claim 18 is now directed to a method of treating infertility disorders by administering an LH-RH antagonist inducing follicle growth by administration of exogenous gonadotropin, the improvement comprising administering an amount of LH-RH antagonist in a single or dual dose sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected, wherein suppression of endogenous LH activity is followed by maintenance of follicle development by endogenous gonadotropins without external stimulation. Support for amended claim 16 can be found throughout the specification, for example, on page 10, lines 13, 15, and 17-19 and originally filed claim 1.

Amended claim 21 is now directed to a method for controlling ovarian stimulation comprising administering Cetrorelix in either a single or dual dose of 1 to 10 mg inducing ovulation between day 9 to 20 of the menstruation cycle. Support for amended claim 21 can be found throughout the specification, for example, on page 5, lines 14-19; and originally filed claims 6, 7, and 10.

Claims 15, 18, 23 and 24 were also amended to correct obvious grammatical errors, and not for any reasons related to patentability. Specifically, "LHRH Antagonist" was amended to "LHRH antagonist." In addition, claim 18 had been previously amended in the

response filed February 27, 2003 addressing the objection to the term " being," which has been replaced with the word "comprising" as suggested by the examiner.

In paragraph 3 of the official action, the examiner provisionally rejected claims 15, 16, 18-24, and 26-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 22-25, 30, 31, 33, 36-39, 41-48 of copending Application No. 09/053,152. Upon notice of allowance of any of the pending claims at issue, the applicants will file a terminal disclaimer to overcome the provisional rejection.

The applicants do not intend by these or any amendments to abandon subject matter of the claims as originally filed or later presented, and reserve the right to pursue such subject matter in continuing applications.

Patentability Remarks

The Rejection Under 35 U.S.C. § 112, second paragraph, Should be Withdrawn

Rejection of claims 19 under 35 U.S.C. § 112, second paragraph were addressed in applicants response filed February 27, 2003. Accordingly, the applicants respectfully request withdrawal of the §112, second paragraph rejection.

The Rejection Under 35 U.S.C. § 102(b), Should be Withdrawn

The examiner has maintained the rejection of claims 21, 22, and 33 under 35 U.S.C. § 102(b) as being anticipated by Diedrich *et al.* (hereafter Diedrich). Specifically, the examiner alleged that Diedrich discloses a method of inducing ovarian stimulation in tubal sterile patients by administering of exogenous gonadotropins (HCG) and the LHRH antagonist Cetrorelix to patients. The examiner continued by alleging Diedrich teaches Cetrorelix was administered at a dosage 3 mg daily starting at day 7 of the menstrual cycle. The examiner concluded by stating claims 22 and 33 are anticipated by Diedrich because Diedrich discloses administration of the same active agent, Cetrorelix to a patient using applicants' claimed method steps and that the induction of ovulation between day 9 and 20 or 9 and 16 of the menstruation cycle is inherent. In light of the foregoing amendments and remarks, the applicants respectfully traverse the rejection.

Amended claim 21 is now directed to a method of controlled ovarian stimulation comprising administering Cetrorelix in either **a single or dual dose** of 1 to 10 mg and inducing ovulation between day 9 to 20 of the menstruation cycle. Claim 22 is now directed to a method according to claim 21 in which Cetrorelix is applied starting cycle day 4 to 8 and ovaluation can be induced between day 9 to 20 of the menstruation cycle. Claim 33 is now directed to the method according to claim 21 wherein Cetrorelix is applied starting on cycle day 6 to 10 and ovulation can be induced between day 9-16 of the menstruation cycle.

In view of the foregoing amendments to the claims, the rejection under 35 U.S.C. § 102(b) over Diedrich is now moot. Solely for purposes of expediting prosecution and without prejudice to the applicants' right to seek broader claims in a continuing application the applicants have amended claims 21, 22, and 33 to distinguish the claimed invention over the cited document. The amended claims are directed to a method of controlled ovarian stimulation comprising administering Cetrorelix in either **a single or dual dose** of 1 to 10 mg starting on day 4 to 8 and inducing ovulation between day 9 to 20 of the menstruation cycle which are neither disclosed nor suggested by the cited document. Diedrich teaches administering **multiple dosages** (1 or 3 mg/day over a 7 day period) of Cetrorelix for controlling LH surges and eventually inducing ovulation (see Figure 1 on page 789 and lines 42-46, first column page 789). Diedrich's Cetrorelix treatment regimen is at **least 7 days** long vs. the single or dual dose regimen as currently claimed by applicants. Accordingly, in view of the foregoing amendments and remarks, the applicants respectfully submit claim 21 and related dependent claims 22 and 33 are not anticipated by Diedrich.

The Rejection Under 35 U.S.C. § 103(a), Should be Withdrawn

The rejection of claims 1-16, 18-24, and 26-37 were maintained by the examiner as obvious over Diedrich *et al.* (hereafter Diedrich) in view of Felberbaum *et al.* (hereafter Felberbaum). Specifically, the examiner alleged that concerning the applicants' arguments that the dosages of Cetrorelix taught by Diedrich and Felberbaum are higher than the claimed invention, the arguments do not commensurate in scope with the claimed methods and the claims are in the alternative with regard to the single/dual dose regimen and the multiple dose regimen. The examiner further explained that Diedrich and Felberbaum both disclose the applicants' claimed dosage amounts and the use of lower dosages (0.5 mg/day) to prevent premature LH surges. The examiner concluded by stating (1) the claims were obvious to one

of skill in the art because the combination of the method taught by Diedrich to treat infertility with Falberbaum teachings that raise the expectation of success of Diedrich's methods by disclosing (1) ovarian stimulation is induced, (2) the treatments resulted in an LH surges, (3) there was "satisfactory follicular maturation," and (4) Cetrorelix/gonadotropin wer used, all are within the scope of applicants claimed method. In view of the foregoing amendment and remarks, the applicants respectfully traverse the rejection.

Amended claim 15 is now directed to a method of treating infertility disorders by administering an LH-RH antagonist and administering an exogenous gonadotropin for inducing follicle growth, the improvement comprising administering the LH-RH antagonist within a cotrolled ovarian stimulation program either in a **single or dual dose regimen** of 1 to 10 mg. Amended claim 18 is now directed to a method of treating infertility disorders by administering an LH-RH antagonist inducing follicle growth by administration of exogenous gonadotropin, the improvement comprising administering an amount of LHRH antagonist in a **single or dual dose** sufficient to suppress only endogenous LH, while FSH secretion is maintained at a natural level and individual estrogen development is not affected, wherein suppression of endogenous LH activity is followed by maintenance of follicle development by endogenous gonadotropins without external stimulation. Amended claim 21 is now directed to a method of controlled ovarian stimulation comprising administering Cetrorelix in either **a single or dual dose** of 1 to 10 mg and inducing ovulation between day 9 to 20 of the menstruation cycle. Diedrich neither teaches nor suggested the claimed method of administering a single or dual dose of LHRH antagonist. Rather, Diedrich teaches a dose regimen of 1 or 3 mg/day of Cetrorelix over a seven day period. Diedrich does not suggest shortening the dosage regimen to a single or dual dose of LHRH antagonist, but rather states the seven day, multiple regimen of Cetrorelix is advantageous because the treatment period has been shorted significantly and the unwanted side-effect of a flare-up of gonadotrophins induced by GnRH antagonists, does not occur (see 790 bottom second column and page 791 lines 1-2).

Felberbaum is cited in this rejection for its raised expectations of using lower dosages (as low as 0.5 mg/day for over 13 days), the suppressive effects of Cetrorelix on LH surges, and the ovarian stimulation. Felberbaum does not teach administration of a single or dual dose of Cetrorelix but rather teaches a three different dosage regimens of 3 mg/day over 7 days, 1 mg/day over 8 days and 0.5 mg/day over 13 days. Since Diedrich is silent with

regard to a single/dual dose regimen, and both references actually teach dose regimens of at least 7 days, there is no longer any motivation to combine Diedrich with Felberbaum.

Accordingly, Diedrich, either alone or in combination with Felberbaum, neither disclose nor suggest the claimed method of claims 15, 16, 18-24, and 26-37. Therefore, the applicants respectfully request the withdrawal of the rejection based on 35 U.S.C. § 103(a).

CONCLUSION

In view of the foregoing, the claims are now believed to be in a form for allowance, and such action is hereby solicited. If any point remains at issue which the examiner feels may be best resolved through a personal or telephone interview, the examiner is strongly urged to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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